DIRECT CURRENT LEAK DETECTION DEVICE

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Abstract of **JP2003315374**

<P>PROBLEM TO BE SOLVED: To provide a miniaturizable direct current leak detection device capable of simplifying a constitution, and having excellent productivity. <P>SOLUTION: This device is equipped with two ring cores 4a, 4b penetrated by a direct current circuit 2 for supplying a power source from a direct current power source 1 to a load apparatus 3, a first excitation winding 5a wound on one of the ring cores 4a, 4b, to which an alternating current source 7 is supplied to thereby generate a magnetic flux, a second excitation winding 5b connected to the first excitation winding 5a in antiphase parallel, and wounded on the other of the ring cores 4a, 4b, to which the alternating current source 7 is supplied to thereby generate a magnetic flux having a reverse phase to the magnetic flux generated by the first excitation winding 5a, a detection winding 6 wound collectively across the two ring cores 4a, 4b, for generating an induced current, an integrating circuit 9 for integrating the induced current detected by the detection winding 6, and a leak determination circuit 11 for outputting a leak signal based on a comparison result between an integrated value by the integrating circuit 9 and a reference value. <P>COPYRIGHT: (C) 2004,JPO